

WHAT IS CLAIMED IS:

1 1. A system for making quality measurements in a network, the
2 system comprising:
3 a plurality of routers for routing traffic through the network;
4 means for taking measurements on a path between a first router and a
5 second router; and
6 means for charging at least one of the plurality of routers when data
7 related to the measurements falls below a target value.

1 2. The system of claim 1, wherein the network is a Voice-over-
2 Internet Protocol (VoIP) network.

1 3. The system of claim 1, wherein the data related to the
2 measurements is an R-Factor.

1 4. The system of claim 1, further comprising a manual mechanism for
2 entering information into a matrix.

1 5. The system of claim 4, wherein the information comprises at least
2 one of:
3 an indication of a site where a problem occurs;
4 an indication of the nature of the problem;
5 a start time indicating when the data related to the measurements falls
6 below the target value;
7 an end time indicating when the data related to the measurements
8 rises above the target value; and
9 an identifier of an individual that reports the problem.

1 6. The system of claim 4, wherein the matrix includes a matrix of
2 source routers and destination routers.

1 7. The system of claim 6, wherein the matrix includes set events and
2 clear events for at least one of the source routers and at least one of the destination
3 routers.

1 8. A method of making quality measurements in a network, the
2 method comprising:
3 tracking at least one path that exhibits an R-Factor below a target
4 threshold;
5 tracking a start time indicating when the R-Factor of a particular path
6 falls below the target value;
7 tracking an end time indicating when the R-Factor of the particular
8 path rises above the target value;
9 determining if an overlap exists between the start time and the end
10 time for multiple paths connecting to a particular router;
11 charging the particular router with one degradation if the overlap
12 exists; and
13 charging the particular router with each degradation if the overlap
14 does not exist.

1 9. The method of claim 8, wherein the target value is 70.

1 10. The method of claim 8, further comprising the step of entering the
2 start time as a set event in a matrix.

1 11. The method of claim 8, further comprising the step of entering the
2 end time as a clear event in a matrix.

1 12. A server for making quality measurements in a network, the server
2 comprising:
3 means for taking measurements on a path between a first router and a
4 second router; and
5 means for charging at least one of the plurality of routers when data
6 related to the measurements falls below a target value.

1 13. The server of claim 12, wherein the network is a Voice-over-
2 Internet Protocol (VoIP) network.

1 14. The server of claim 12, wherein the data related to the
2 measurements is an R-Factor.

1 15. The server of claim 12, further comprising a manual mechanism
2 for entering information into a matrix.

1 16. The server of claim 15, wherein the information comprises at least
2 one of:
3 an indication of a site where a problem occurs;
4 a start time indicating when the data related to the measurements falls
5 below the target value;

6 an end time indicating when the data related to the measurements
7 rises above the target value; and
8 an identifier of an individual that reports the problem.

1 17. The server of claim 15, where the information further comprises an
2 indication of the nature of the problem;

1 18. The server of claim 15, wherein the matrix includes a matrix of
2 source routers and destination routers.

1 19. The server of claim 18, wherein the matrix includes set events and
2 clear events for at least one of the source routers and at least one of the destination
3 routers.